

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A breakaway bearing mount comprising:

[a shaft, said shaft having a first end and a second end;]

a frame having at least one receiving hole for receiving a shearing device therein;

a [first]lower shear plate defining at least one [shear plate]shear plate shearing device hole adapted to receive [the first shearing device]one or more shearing devices, said shearing devices having a shear strength, with said lower shear plate attached to said frame by said one or more shearing devices and said lower shear plate attached to a bearing assembly[through a bearing assembly connection means];

a bearing assembly [having a bearing assembly connection means]enclosing a rotatable shaft, said bearing assembly including said one or more bearing assembly connectors, said bearing assembly [able to be mounted]configured for mounting to [the]said lower shear plate through [the]one or more bearing assembly [connection means]connectors having a shear strength greater than [the]said shear strength of the shearing device;

wherein the one or more shearing devices are configured to break before the bearing assembly [connection means]connector when the shaft is subjected to a predetermined minimum stress.

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2. (Currently Amended) The breakaway bearing mount of claim 1 wherein said [shearing devices is at least one]one or more shearing devices are shear [bolt]bolts having a corresponding shear bolt nut.
3. (Currently Amended) The breakaway bearing mount of claim 1 wherein said [shearing device is at least one shear pin]one or more shearing devices are shear pins having a closure.
4. (Currently Amended) The breakaway bearing mount of claim 1 wherein said bearing assembly [connection means is at least one]connectors are bearing [bolt]bolts having a corresponding bearing nut.
5. (Currently Amended) The breakaway [claim]bearing mount of claim 1 which further comprises[comprising]:
- [a second]an upper shear plate defining at least one [second]upper shear plate shearing device hole, attached to said lower shear plate through use of at least one upper shear plate shearing device extending through at least one [second]upper shear plate shearing device hole, and having a bearing assembly [connecting means]connector for connecting said [second]upper shear plate to [the]said bearing assembly, wherein the shearing strength of the [second]upper shearing device is greater than the shearing strength of the [first]lower shearing device but less than the shearing strength of the bearing assembly connection means.

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6. (Currently Amended) The breakaway [claim]bearing mount of claim 1 wherein said bearing assembly further comprises:

a first bearing assembly portion defining a first plurality of bearing assembly bolt holes, the first bearing assembly portion [able to be mounted to the first]configured for mounting to said lower shear plate through [the bearing assembly mounting means, the first bearing assembly rotatably supporting the first shaft end; and]said bearing assembly connectors extending through the first plurality of bearing assembly bolt holes and the first plurality of assembly bolt holes, with said bearing assembly bolts attaching through use of corresponding nuts, said first bearing assembly rotatably supporting a first end of said shaft; and

a second bearing assembly portion defining a second plurality of bearing assembly bolt holes, said second bearing assembly portion[able to be mounted to the first] configured for mounting to a upper shear plate through said bearing assembly [portion through a plurality of bearing assembly bolts]connectors extending through the second plurality of bearing assembly bolt holes and the [first]second plurality of assembly bolt holes, said second plurality of bearing assembly bolts able to be attached through use of corresponding [plurality of]nuts, [the]said second bearing assembly rotatably supporting said second end of said shaft[shaft end].

7. (Currently Amended) The breakaway bearing mount of claim [6]5 in which said [first and second shear plates]lower shear plate and said upper shear plate further [indicate]include a plurality of bolt head recesses for containment of bolt heads of the bearing assembly shear bolts.

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8. (Original) The breakaway bearing mount of claim 7, wherein said first and second bearing assemblies are pillow block bearings.

9. (Currently Amended) The breakaway bearing mount of claim 6 wherein said [first] lower shear plate and upper shear plate are [is]mounted to said frame through use of a plurality of shear bolts extending through a plurality of shear bolt holes, and attached through use of a plurality of corresponding nuts.

10. (Currently Amended) The breakaway bearing mount of claim 1 [further comprising a]in which said shaft includes an attached hammermill.

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11. (Original) A combination comprising:

a rotatable shaft, said shaft having a first shaft end and a second shaft end;
a frame;
a first shear plate mounted to said frame through use of at least one plate shear bolt;
a second shear plate mounted to said frame through use of at least one plate shear bolt;
a first bearing assembly mounted to said first shear plate through use of at least one bearing shear bolt, said first bearing assembly rotatably supporting said first shaft end; and
a second bearing assembly mounted to said second shear plate through use of at least one shear bearing bolt, said second bearing assembly rotatably supporting said second shaft end;
wherein

said plate shear bolts are configured to a lesser shear strength rating than said bearing shear bolts, and in which said plate shear bolts are configured to break prior to the bearing shear bolts when subjected to a shearing force.

12. (Original) The combination according to claim 11, wherein said bearing assemblies are pillow block bearings.

13. (Currently Amended) The combination according to claim 12, wherein said shaft further comprises a hammermill attached to said shaft.

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14. (Currently Amended) A bearing assembly for use with a[,] rotatable shaft, said bearing assembly comprising:

a shear plate mounted to a frame through use of at least one plate shear bolt;

a bearing mounted to said shear plate through use of at least one bearing shear bolt with a bolt head, said bearing rotatably supporting said shaft; wherein

said at least one shear plate bolt is configured to a lesser shear strength than said at least one bearing shear bolt, and said at least one plate bolt is configured to break before said at least one bearing shear bolt when subjected to a shear force.

15. (Original) The bearing assembly for use with a rotatable shaft of claim 14 in which said shear plate further includes a bolt head recess for each bearing shear bolt, for containment of bolt heads of said bearing assembly shear bolts.

16. (Currently Amended) The bearing assembly of claim 14[15], wherein said bearing is a pillow block type bearing. [The bearing assembly of claim 15, wherein said shaft further comprises a hammermill.]

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17. (Currently Amended) A breakaway bearing [mount]assembly, for supporting a shaft and a hammermill, comprising:

a shaft, said shaft having a first shaft end and a second shaft end;

a frame defining at least [one]two frame bolt [hole]holes for receiving at least one frame shear bolt from a first lower shear plate and at least one shear bolt from a second lower shear plate;

a first and second lower shear plate with each defining at least one first shear [plate defining at least one]bolt hole, wherein said first and second lower [plate bolt hole, wherein said first]shear plates are configured for attachment to said frame through use of said [at least one]frame shear [bolt]bolts extending [through]into said [at least one]frame bolt [hole]holes and said [at least one first]lower shear plate bolt hole, [and use of a nut, and]with said first and second lower shear [plate]plates each further defining at least one [lower second]upper shear plate bolt hole, each for receiving a second shear [plate]bolt;

[at least one]a first and a second upper shear plate each defining at least one [upper]second shear [plate]bolt hole wherein said first and second upper shear [plate is] plates are configured for mounting to said [at least one]respective first and second lower shear [plate]plates through use of said [at least one]second shear [plate bolt]bolts extending through said [lower and upper]first and second lower and upper shear [plate] bolt holes and connecting said respective first and second upper and lower shear plates with at least one second shear [plate]bolt[and at least one nut], said first and second upper shear [plate]plates further defining [at least one lower first second]a plurality of bearing [assembly]bolt holes;

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a first bearing assembly defining a [third]plurality of bearing assembly bolt holes, said first bearing assembly [able to be mounted to]configured for mounting to said first upper shear plate [through a first]using a plurality of bearing assembly bolts extending through said [third plurality of]bearing assembly bolt holes and said [first plurality of] bearing [assembly]bolt holes[and able to be attached through use of a third plurality of nuts], said first bearing assembly rotatably supporting the first shaft end; and

a second bearing assembly defining a [fourth]plurality of bearing assembly bolt holes, said second bearing assembly [able to be mounted to]configured for mounting to said second upper shear plate [through a second]using a plurality of bearing assembly bolts extending through said [fourth plurality of]bearing assembly bolt holes and said [second plurality of bearing[bewaring] assembly]bearing bolt holes[and able to be attached through use of a fourth plurality of nuts], said second bearing assembly rotatably supporting the second shaft end; wherein

[said]each of said frame shear bolts and said second shear bolts are configured to a [lesser]lower shear rating that said bearing assembly [shear]bolts and thus said frame shear bolts and said second shear bolts are configured to break before said bearing assembly [shear]bolts when said shaft is subjected to a predetermined minimum stress.

18. (Currently Amended) The breakaway shaft bearing mount of claim [19]17 wherein said first and second shear plates further include a plurality of bolt head recesses for containment of bolt heads of said bearing assembly shear bolts.

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19. (New) A breakaway bearing assembly, for supporting a shaft and a hammermill, comprising:

a shaft, said shaft having a first shaft end and a second shaft end;

a frame defining at least two frame bolt holes for receiving at least one frame shear bolt from a first lower shear plate and at least one frame shear bolt from a second lower shear plate;

a first and second lower shear plate with each defining at least one first shear bolt hole, wherein said first and second lower shear plates are configured for attachment to said frame through use of said frame shear bolts extending into said frame bolt holes and said lower shear plate bolt hole, with said first and second lower shear plates each further defining at least one bearing bolt holes, each for receiving a bearing bolt;

a first bearing assembly defining a plurality of bearing assembly bolt holes, said first bearing assembly configured for mounting to said first lower shear plate using a plurality of bearing assembly bolts extending through said bearing assembly bolt holes and said bearing bolt holes, said first bearing assembly rotatably supporting the first shaft end; and

a second bearing assembly defining a plurality of bearing assembly bolt holes, said second bearing assembly configured for mounting to said second lower shear plate using a plurality of bearing assembly bolts extending through said bearing assembly bolt holes and said bearing bolt holes, said second bearing assembly rotatably supporting the second shaft end; wherein

each of said frame shear bolts are configured to a lower shear rating than said bearing assembly bolts and thus said frame shear bolts and said second shear bolts are configured to

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break before said bearing assembly bolts when said shaft is subjected to a predetermined minimum stress.

20. (New) A breakaway bearing mount comprising:

a frame having at least one receiving hole for receiving a shearing device therein;

a lower shear plate defining at least one shearing device hole adapted to receive one or more shear bolts, said shear bolts having a shear strength, and used with a corresponding nut, with said lower shear plate attached to said frame by said one or more shear bolts and said lower shear plate attached to a bearing assembly;

a bearing assembly enclosing a rotatable shaft, said bearing assembly including one or more bearing bolts, said bearing bolts configured for mounting to said lower shear plate and a shear strength greater than said shear strength of the shear bolts;

wherein the one or more shear bolts are configured to break before the bearing bolts when the shaft is subjected to a predetermined minimum stress.

21. (New) The breakaway bearing mount of claim 5 wherein said bearing assembly further comprises:

a first bearing assembly portion defining a first plurality of bearing assembly bolt holes, the first bearing assembly portion configured for mounting to said lower shear plate through said bearing bolts extending through bearing bolt holes, with said bearing bolts attaching through use of corresponding nuts, said first bearing assembly rotatably supporting a first end of said shaft; and

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a second bearing assembly portion defining a second plurality of bearing bolt holes, said second bearing assembly portion configured for mounting to an upper shear plate through said bearing assembly bolts extending through the second plurality of bearing bolt holes, said second bearing assembly rotatably supporting said second end of said shaft.

22. (New) The breakaway bearing mount of claim 21 in which said lower shear plate and said upper shear plate further include a plurality of bolt head recesses for containment of bolt heads of the bearing bolts and shear bolts.

23. (New) The breakaway bearing mount of claim 21, wherein said lower and upper bearing assemblies are pillow block bearings.

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